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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/771,700      | 01/30/2001  | Hiroshi Okamoto      | 010064              | 9493             |

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EXAMINER

AHMED, SHEEBA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1773

DATE MAILED: 08/12/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/771,700

Applicant(s)

OKAMOTO ET AL.

Examiner

Sheeba Ahmed

Art Unit

1773

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All   b) ☐ Some \*   c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 1.                      6) ☐ Other:

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "finely divided" in claim 1 is a relative phrase which renders the claim indefinite. The phrase "finely divided" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al. (US 6,156,817) in view of Cochran II, et al. (US 6,211,500 B1).

Okamoto et al. disclose a functional form, i.e., a molded article, comprising a resin compounded with a functional component, having antimicrobial properties or deodorizing properties, selected from the group consisting of a catechin, a saponin, a

Art Unit: 1773

tea-leaf powder, a tea-leaf extract and tannin and a ceramics component (Column 2, lines 25-26 and 36-42). The functional component and the ceramics component are in a state of composite particles wherein these components have been compounded together (Column 2, lines 58-64). The ceramics component may be a combination of ceramics particles, an inorganic sintering aid and an inorganic flocculent, a combination of an inorganic sintering aid and an inorganic flocculent or a water swelling clay mineral (Column 3, lines 55-61 and Column 4, lines 44-46). Okamoto et al. do not specifically state that their functional form, i.e., the functional composition or the functional molding, comprises a finely divided tabular mineral. However, Cochran, II et al. disclose a melt processed, molded composition comprising polyolefin and a platy inorganic mineral such as mica (Column 3, lines 28-32, Column 4, lines 23-30 and Column 8, lines 40-50). The mica provides a reinforcement effect and is preferable compared to other inorganic fibrous fillers given that less weight % of mica is required to obtain the same effect as with other inorganic fillers. The mica is easily cleaved to obtain leaf-like flakes and is much softer than other inorganic fillers, has a slippery tactile feel and low abrasiveness compared to other fillers (Column 9, lines 50-65). Accordingly, it would have been obvious to one having ordinary skill in the art to add mica to the functional composition and molding disclosed by Okamoto et al. given that Cochran II, et al. specifically teach that doing so provides a reinforcement effect to the molding.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 5, 6, 9, and 10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3 and 4 of U.S. Patent No. 6,423,408 B2 in view of Cochran II, et al. (US 6,211,500 B1).

Claims 1, 3, and 4 of U.S. Patent No. 6,423,408 B2 recite a core-sheath type joining composite molding comprising an internal component X and an external component Y wherein the internal component is formed of a first resin and the external component is formed from a second resin, a functional component selected from the group consisting of catechin, saponin, tea-leaf powder, tea-leaf extract and tannin, and a ceramics component compounded in a state of composite particles. Claims 1, 3, and 4 do not specifically recite that the external component further comprises a finely divided tabular mineral. However, Cochran, II et al. disclose a melt processed, molded composition comprising polyolefin and a platy inorganic mineral such as mica (Column 3, lines 28-32, Column 4, lines 23-30 and Column 8, lines 40-50). The mica provides a

Art Unit: 1773

reinforcement effect and is preferable compared to other inorganic fibrous fillers given that less weight % of mica is required to obtain the same effect as with other inorganic fillers. The mica is easily cleaved to obtain leaf-like flakes and is much softer than other inorganic fillers, has a slippery tactile feel and low abrasiveness compared to other fillers (Column 9, lines 50-65). Accordingly, it would have been obvious to one having ordinary skill in the art to add mica to the joining type composite molding claimed in claims 1, 3, and 4 of U.S. Patent 6,423,408 B2 given that Cochran II, et al. specifically teach that doing so provides a reinforcement effect to the molding.


### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (703)305-0594. The examiner can normally be reached on Mon-Fri 8am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Thibodeau can be reached on (703)308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-5408 for regular communications and (703)305-3599 for After Final communications.



Sheeba Ahmed  
July 31, 2002



Paul Thibodeau  
Supervisory Patent Examiner  
Technology Center 1700